Journal of Analytical and Applied Pyrolysis, 20 (1991) 337–340
Elsevier Science Publishers B.V., Amsterdam

Author Index

Bold numbers **19** and **20** refer to Volume numbers, i.e. Parts I and II respectively

Aizenshtat, Z., see Bar, H., **19**, 265
Angelino, S.A.G., see Tas, A.C., **20**, 73
Arisz, P.W., see Lomax, J.A., **19**, 65
Atkinson, D.J.
–, and Lehrle, R.S.
Trimer formation studies in polystyrene pyrolysis reveal that time-resolved mass spectrometry can be misleading, **19**, 319

Baer, N.S., see Shedrinsky, A.M., **20**, 229
Baltes, W., see Schrödter, R., **19**, 131
Bar, H.
–, and Aizenshtat, Z.
Phenol–formaldehyde resins as a link to the understanding of the isothermal kinetic behavior of geopolymers (kerogens and coals), **19**, 265
Baronnet, F., see Billaud, F., **19**, 29
Bassilakis, R., see Solomon, P.R., **19**, 1
Billaud, F.
–, Elyahyaoui, K. and Baronnet, F.
Mechanistic modeling of the pyrolysis of *n*-hexane, **19**, 29
Blasco, J. see Granada, E., **19**, 193
Blazso, M.
–, and Tóth, T.
Sequence of phenolic units in phenol–formaldehyde polycondensates studied by pyrolysis–gas chromatography/mass spectrometry, **19**, 251
Blazso, M., see Groves, S.A., **19**, 301
Bo, P., see Carlsen, L., **19**, 15
Boon, J.J., see Lomax, J.A., **19**, 65
Boon, J.J., see Scheijen, **19**, 153
Boon, J.J., see Mulder, M.M., **19**, 175
Boon, J.J., see Niemann, G.J., **19**, 213
Boon, J.J., see Eglinton, T.I., **20**, 25
Boon, J.J., see Weeding, T.L., **20**, 47
Boon, J.J., see Oudemans, T.F.M., **20**, 197
Boon, J.J., see van Loon, W.M.G., **20**, 275
Boon, J.J., see Luijk, R., **20**, 303
Borchers, G., see Köll, P., **19**, 119

Carangelo, R.M., see Solomon, P.R., **19**, 1
Carlsen, L.
–, Feldthus, A. and Bo, P.
Solid state pyrolyses. Part 2. Solid state kinetics studied by pyrolysis–gas chromatography, **19**, 15
Challinor, J.M.
The scope of pyrolysis methylation reactions, **20**, 15
Charpenay, S., see Solomon, P.R., **19**, 1
Chiavari, G.
–, Ferretti, S., Galletti, G.C. and Mazzeo, R.
Analytical pyrolysis as a tool for the characterization of organic substances in artistic and archaeological objects, **20**, 253
Chornet, E., see Julien, S., **19**, 81
Comellas, L., see Granada, E., **19**, 193
Commandeur, J.M., see Lomax, J.A., **19**, 65

De Groot, B., see van Loon, W.M.G., **20**, 275
De Leeuw, J.W., see Hartgers, W.A., **20**, 141
De Leeuw, J.W., see van Aarssen, B.G.K., **20**, 125
De Wit, P., see Oudhuis, A.B.J., **20**, 321
Dueppenbecker, S.J., see Horsfield, B., **20**, 107
Dyrkacz, G.R., see Giuliani, J.D., **20**, 151

Eglinton, T.I.
–, Larter, S.R. and Boon, J.J.
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25
Eijkel, G.B., see Niemann, G.J., **19**, 213
Eijkel, G.B., see Luijk, R., **20**, 303
Elyahyaoui, K., see Billaud, F., **19**, 29

Feldthus, A., see Carlsen, L., **19**, 15
Ferretti, S., see Chiavari, G., **20**, 253
Fox, A., see Watt, B.E., **19**, 237
Franck, J., see Kaminsky, W., **19**, 311

Galletti, G.C.
–, and Reeves III, J.B.
Pyrolysis–gas chromatography/mass spectrometry of lignocellulosics in forages and by-products, **19**, 203
Galletti, G.C., see Chiavari, G., **20**, 253
Gassiot, M., see Granada, E., **19**, 193
Gellerstedt, G., see Kleen, M., **19**, 139
Georgakopoulos, K., see Statheropoulos, M., **20**, 65
Gethner, J., see Gray, N.R., **20**, 87
Giuliani, J.D.
–, Peirong, W., Dyrkacz, G.R. and Johns, R.B.
The characterisation of two Australian bi-

tuminous coals and isolated maceral fractions by sequential pyrolysis–gas-chromatography/mass spectrometry, **20**, 151
Gomez-Alarcon, G., see Saiz-Jimenez, C., **20**, 239
Govers, H.A.J., see Luijk, R., **20**, 303
Granada, E.
–, Blasco, J., Comellas, L. and Gassiot, M.
Pyrolysis–gas chromatographic analyses of organic matter in soils using nitrogen-selective detection, **19**, 193
Gray, N.R.
–, Lancaster, C.J. and Gethner, J.
Chemometric analysis of pyrolysate compositions: a model for predicting the organic matter type of source rocks using pyrolysis–gas chromatography, **20**, 87
Groves, S.A.
–, Lehrle, R.S., Blazso, M. and Szekely, T.
Natural rubber pyrolysis: study of temperature- and thickness-dependence indicates dimer formation mechanism, **19**, 301

Hancox, R.N., Lamb, G.D. and Lehrle, R.S.
Sample size dependence in pyrolysis: an embarrassment, or a utility?, **19**, 333
Hartgers, W.A.
–, Sinninghe Damste, J.S. and De Leeuw, J.W.
Flash pyrolysis of silcon-bound hydrocarbons, **20**, 141
Helleur, R.J., see Kelly, J., **19**, 105
Hermosin, B., see Saiz-Jimenez, C., **20**, 239
Horsfield, B.
–, and Dueppenbecker, S.J.
The decomposition of Posidonia Shale and Green River Shale kerogens using microscale sealed vessel (MSSV) pyrolysis, **20**, 107
Horsfield, B., see van Aarssen, B.G.K., **20**, 125

Ibarra, J.V.
–, and Moliner, R.
Coal characterization using pyrolysis–Fourier transform infrared spectroscopy, **20**, 171
Inoue, H., see Kim, M.G., **20**, 263

Johns, R.B., see Giuliani, J.D., **20**, 151
Johns, R.B., see Li, M., **20**, 161
Julien, S. Chornet, E., Tiwari, P.K. and Overend, R.P.
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations, **19**, 81

Kaminsky, W.
–, and Franck, J.
Monomer recovery by pyrolysis of poly (methyl methacrylate) (PMMA), **19**, 311
Kelly, J.
–, Mackey, M. and Helleur, R.J.
Quantitative analysis of saccharides in wood pulps by quartz-tube pulse pyrolysis–polar phase gas chromatography, **19**, 105
Kim, M.G.
–, Yagawa, K., Inoue, H. and Shirai, T.
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263
Kistemaker, P.G., see Weeding, T.L., **20**, 47
Kleen, M.
–, and Gellerstedt, G.
Characterization of chemical and mechanical pulps by pyrolysis–gas chromatography/mass spectrometry, **19**, 139
Köll, P.
–, Borchers, G. and Metzger, J.O.
Thermal degradation of chitin and cellulose, **19**, 119

La Vos, G.F., see Tas, A.C., **20**, 73
Lamb, G.D., see Hancox, R.N., **19**, 333
Lancaster, C.J., see Gray, N.R., **20**, 87
Larter, S.R., see Eglinton, T.I., **20**, 25
Lehrle, R.S., see Groves, S.A., **19**, 301
Lehrle, R.S., see Atkinson, D.J., **19** 319
Lehrle, R.S., see Hancox, R.N., **19**, 333
Li, M.
–, and Johns, R.B.
Differentiation of Victorian brown coal lithotypes as revealed by thermally desorbable biomarkers, **20**, 161
Linnartz, T.C.T., see van der Peyl, G.J.Q., **19**, 279
Lomax, J.A.
–, Commandeur, J.M., Arisz, P.W. and Boon, J.J.
Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65
Luijk, R.
–, Govers, H.A.J., Eijkel, G.B. and Boon, J.J.
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromides and brominated styrene oligomers, **20**, 303

Mackey, M., see Kelly, J., **19**, 105
Mazzeo, R., see Chiavari, G., **20**, 253
Metzger, J.O., see Köll, P., **19**, 119
Moliner, R., see Ibarra, J.V., **20**, 171
Montaudo, G., see Statheropoulos, M., **20**, 57
Montaudo, G., see Statheropoulos, M., **20**, 65

Morgan, S.L., see Watt, B.E., **19**, 237
Moulijn, J.A., see Oudhuis, A.B.J., **20**, 321
Mulder, M.M.
–, Pureveen, J.B.M. and Boon, J.J.
An analytical pyrolysis mass spectrometric study of *Eucryphia cordifolia* wood decayed by white-rot and brown-rot fungi, **19**, 175

Niemann, G.J.
–, Boon, J.J., Pureveen, J.B.M., Eijkel, G.B. and van der Heijden, E.
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus-infected carnation by pyrolysis–mass spectrometry, **19**, 213

Ortega-Calvo, J.J., see Saiz-Jimenez, C., **20**, 239
Oudemans, T.F.M.
–, and Boon, J.J.
Molecular archaeology: Analysis of charred (food) remains from prehistoric pottery by pyrolysis–gas chromatography/mass spectrometry, **20**, 197
Oudhuis, A.B.J.
–, de Wit, P., Tromp, P.J.J. and Moulijn, J.A.
An exploratory study of the processing of plastics, by means of pyrolysis, with the emphasis on PVC/aluminum combinations, **20**, 321
Overend, R.P., see Julien, S., **19**, 81

Peirong, W., see Giuliani, J.D., **20**, 151
Piskorz, J., see Radlein, D., **19**, 41
Plage, B. and Schülten, H.-R.
Thermal degradation mechanism of amphiphilic acrylic copolymers studied by temperature-resolved pyrolysis–field ionization mass spectrometry, **19**, 285
Pureveen, J.B.M., see Mulder, M.M., **19**, 175
Pureveen, J.B.M., see Niemann, G.J., **19**, 213
Pusch, G., see Ranjbar, M., **20**, 185

Radlein, D.
–, Piskorz, J. and Scott, D.S.
Fast pyrolysis of natural polysaccharides as a potential industrial process, **19**, 41
Ranjbar, M.
–, and Pusch, G.
Pyrolysis and combustion kinetics of crude oils, asphaltenes and resins in relation to thermal recovery processes, **20**, 185
Reeves III, J.B., see Galletti, G.C., **19**, 203

Saiz-Jimenez, C.
–, Hermosin, B., Ortega-Calvo, J.J. and Gomez-Alarcon, G.
Applications of analytical pyrolysis to the study of stony cultural properties, **20**, 239
Scheijen, M.A.
–, and Boon, J.J.
Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153
Schrödter, R.
–, and Baltes, W.
Pyrolysis of various furan model compounds, **19**, 131
Schülten, H.-R., see Plage, B., **19**, 285
Scott, D.S., see Radlein, D., **19**, 41
Serio, M.A., see Solomon, P.R., **19**, 1
Shedrinsky, A.M.
–, Stone, R.E. and Baer, N.S.
Pyrolysis gas chromatographic studies on Egyptian archaeological specimens: organic patinas on the "Three Princesses" gold vessel, **20**, 229
Shirai, T., see Kim, M.G., **20**, 263
Sinninghe Damste, J.S., see Hartgers, W.A., **20**, 141
Solomon, P.R.
–, Serio, M.A., Carangelo, R.M., Bassilakis, R., Yu, Z.Z., Charpenay, S. and Whelan, J.
Analysis of coal by thermogravimetry–Fourier transform infrared spectroscopy, **19**, 1
Statheropoulos, M.
–, and Montaudo, G.
IONIA: An Expert System for the prediction of the thermal decomposition of condensation polymers, **20**, 57
Statheropoulos, M.
–, Georgakopoulos, K. and Montaudo, G.
The interpretation of pyrolysis mass spectra of polymers using a "hybrid" software system based on library searching with heuristics, **20**, 65
Steenvoorden, R.J.J., see Weeding, T.L., **20**, 47
Stone, R.E., see Shedrinsky, A.M., **20**, 229
Szekely, T., see Groves, S.A., **19**, 301

Tas, A.C.,
–, Angelino, S.A.G., La Vos, G.F. and van der Greef, J.
Data analysis of pyrolysis–mass spectrometric profiles generated with soft ionization detection: application to barley tissue profiles, **20**, 73
Tiwari, P.K., see Julien, S., **19**, 81
Toth, T., see Blazso, M., **19**, 251
Tromp, P.J.J., see Oudhuis, A.B.J., **20**, 321

Van Aarssen, B.G.K.
–, De Leeuw, J.W. and Horsfield, B.
A comparative study of three different pyrol-

ysis methods used to characterise a biopolymer isolated from fossil and extant dammar resins, **20**, 125

Van der Greef, J., see Tas, A.C., **20**, 73

Van der Heijden, E., see Niemann, G.J., **19**, 213

Van der Peyl, G.J.Q.

–, Linnartz, T.C.T., van Rossum, C.A.J. and Zeelenberg, M.
Identification of polar monomers in poly acrylate dispersions with pyrolysis–gas chromatography/mass spectrometry, **19**, 279

Van Loon, W.M.G.

–, Boon, J.J. and de Groot, B.
Qualitative analysis of chlorolignins and lignosulphonates in pulp mill effluents entering the river Rhine using pyrolysis–mass spectrometry and pyrolysis–gas chromatography/mass spectrometry, **20**, 275

Van Rossum, C.A.J., see van der Peyl, **19**, 279

Watt, B.E.

–, Morgan, S.L. and Fox, A.
2-Butenoic acid, a chemical marker for poly-β-hydroxybutyrate identified by pyrolysis–gas chromatography/mass spectrometry in analyses of whole microbial cells, **19**, 237

Weeding, T.L.

–, Steenvoorden, R.J.J., Kistemaker, P.G. and Boon, J.J.
Laser desorption multiphoton ionization mass spectrometry, **20**, 47

Whelan, J., see Solomon, P.R., **19**, 1

Winans, R.E.
Pyrolysis fast atom bombardment tandem mass spectrometry characterization of coals, **20**, 1

Yagawa, K., see Kim, M.G., **20**, 263

Yu, Z.Z., see Solomon, P.R., **19**, 1

Zeelenberg, M., see van der Peyl, G.J.Q., **19**, 279

Journal of Analytical and Applied Pyrolysis, 20 (1991) 341–349
Elsevier Science Publishers B.V., Amsterdam

Subject Index

Bold numbers **19** and **20** refer to Volume numbers, i.e. Parts I and II respectively

Ammonium bisulfate
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263
Ammonium sulfate
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263
Analysis
Characterization of chemical and mechanical pulps by pyrolysis-gas chromatography/mass spectrometry, **19**, 139
Anhydro-oligosaccharides
Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65
Archaeology
Analytical pyrolysis as a tool for the characterization of organic substances in artistic and archaeological objects, **20**, 253
Molecular archaeology: analysis of charred (food) remains from prehistoric pottery by pyrolysis–gas chromatography/mass spectrometry, **20**, 197
Pyrolysis gas chromatographic studies on Egyptian archaeological specimens: organic patinas on the "Three Princesses" gold vessel, **20**, 229
Argonne coals
Analysis of coal by thermogravimetry–Fourier transform infrared spectroscopy, **19**, 1
Asphaltene
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25
Pyrolysis and combustion kinetics of crude oils, asphaltenes and resins in relation to thermal recovery processes, **20**, 185
Automated interpretation
The interpretation of pyrolysis mass spectra of polymers using a "hybrid" software system based on library searching with heuristics, **20**, 65

Bakelites
Phenol–formaldehyde resins as a link to the understanding of the isothermal kinetic behavior of geopolymers (kerogens and coals), **19**, 265
Barley
Data analysis of pyrolysis–mass spectrometric profiles generated with soft ionization detection: application to barley tissue profiles, **20**, 73
Biomarkers
Differentiation of Victorian brown coal lithotypes as revealed by thermally desorbable biomarkers, **20**, 161
Biopolymer
A comparative study of three different pyrolysis methods used to characterise a biopolymer isolated from fossil and extant dammar resins, **20**, 125
Bituminous coals
The characterisation of two Australian bituminous coals and isolated maceral fractions by sequential pyrolysis–gas-chromatography/mass spectrometry, **20**, 151
Brown coal
Differentiation of Victorian brown coal lithotypes as revealed by thermally desorbable biomarkers, **20**, 161
Brown-rot fungi
An analytical pyrolysis mass spectrometric study of *Eucryphia cordifolia* wood decayed by white-rot and brown-rot fungi, **19**, 175
Butenoic acid
2-Butenoic acid, a chemical marker for poly-β-hydroxybutyrate identified by pyrolysis-gas chromatography/mass spectrometry in analyses of whole microbial cells, **19**, 237

Carbohydrates
Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153
Carbon oxide correlations
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations, **19**, 81
Cellulase
Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153
Cellulose
A microanalytical approach to plant tissue

characterization: a comparative study of healthy and fungus-infected carnation by pyrolysis–mass spectrometry, **19**, 213
Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65
Fast pyrolysis of natural polysaccharides as a potential industrial process, **19**, 41
Thermal degradation of chitin and cellulose, **19**, 119
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations, **19**, 81

Chemical marker
2-Butenoic acid, a chemical marker for poly-β-hydroxybutyrate identified by pyrolysis–gas chromatography/mass spectrometry in analyses of whole microbial cells, **19**, 237

Chemometrics
Chemometric analysis of pyrolysate compositions: a model for predicting the organic matter type of source rocks using pyrolysis–gas chromatography, **20**, 87

Chitin
Thermal degradation of chitin and cellulose, **19**, 119

Chlorolignins
Qualitative analysis of chlorolignins and lignosulphonates in pulp mill effluents entering the river Rhine using pyrolysis–mass spectrometry and pyrolysis–gas chromatography/mass spectrometry, **20**, 275

Coal
Analysis of coal by thermogravimetry–Fourier transform infrared spectroscopy, **19**, 1
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25
Coal characterization using pyrolysis–Fourier transform infrared spectroscopy, **20**, 171
Phenol–formaldehyde resins as a link to the understanding of the isothermal kinetic behavior of geopolymers (kerogens and coals), **19**, 265
Pyrolysis fast atom bombardment tandem mass spectrometry characterization of coals, **20**, 1
Solid state pyrolyses. Part 2. Solid state kinetics studied by pyrolysis–gas chromatography, **19**, 15

Collision-induced dissociation
Data analysis of pyrolysis–mass spectrometric profiles generated with soft ionization detection: application to barley tissue profiles, **20**, 73

Computer language OPS5
IONIA: An Expert System for the prediction of the thermal decomposition of condensation polymers, **20**, 57

Condensation polymers
IONIA: An Expert System for the prediction of the thermal decomposition of condensation polymers, **20**, 57
The interpretation of pyrolysis mass spectra of polymers using a "hybrid" software system based on library searching with heuristics, **20**, 65

Copolymers
Thermal degradation mechanisms of amphiphilic acrylic copolymers studied by temperature-resolved pyrolysis–field ionization mass spectrometry, **19**, 285

Curie-point pyrolysis
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263
Molecular archaeology: analysis of charred (food) remains from prehistoric pottery by pyrolysis–gas chromatography/mass spectrometry, **20**, 197

Curie-point pyrolysis–gas chromatography
Pyrolysis of various furan model compounds, **19**, 131

Dammar
A comparative study of three different pyrolysis methods used to characterise a biopolymer isolated from fossil and extant dammar resins, **20**, 125

Degradation
Thermal degradation mechanisms of amphiphilic acrylic copolymers studied by temperature-resolved pyrolysis–field ionization mass spectrometry, **19**, 285

Degradation pathways
IONIA: An Expert System for the prediction of the thermal decomposition of condensation polymers, **20**, 57

Degradation products
Characterization of chemical and mechanical pulps by pyrolysis–gas chromatography/mass spectrometry, **19**, 139

Demethoxylation
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus-infected carnation by pyrolysis–mass spectrometry, **19**, 213

Derivatisation
The scope of pyrolysis methylation reactions, **20**, 15
Derivative thermogravimetry
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromide and brominated styrene oligomers, **20**, 303
Desorption chemical ionisation
Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65
Dianthramides
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus-infected carnation by pyrolysis–mass spectrometry, **19**, 213
Dianthramine
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus-infected carnation by pyrolysis–mass spectrometry, **19**, 213
Dianthus caryophyllus
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus-infected carnation by pyrolysis–mass spectrometry, **19**, 213
Diels–Alder mechanism
Natural rubber pyrolysis: study of temperature- and thickness-dependence indicates dimer formation mechanism, **19**, 301
Direct chemical ionization
Data analysis of pyrolysis–mass spectrometric profiles generated with soft ionization detection: application to barley tissue profiles, **20**, 73
Direct pyrolysis–mass spectrometry
Thermal degradation mechanisms of amphiphilic acrylic copolymers studied by temperature-resolved pyrolysis–field ionization mass spectrometry, **19**, 285
Discriminant analysis
Data analysis of pyrolysis–mass spectrometric profiles generated with soft ionization detection: application to barley tissue profiles, **20**, 73
Drug analysis
The scope of pyrolysis methylation reactions, **20**, 15

Egypt
Pyrolysis gas chromatographic studies on Egyptian archaeological specimens: organic patinas on the "Three Princesses" gold vessel, **20**, 229
Electron attachment mass spectrometry
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromide and brominated styrene oligomers, **20**, 303
Enhanced oil recovery
Pyrolysis and combustion kinetics of crude oils, asphaltenes and resins in relation to thermal recovery processes, **20**, 185
Enzyme digestion
Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153
Eucryphia cordifolia
An analytical pyrolysis mass spectrometric study of *Eucryphia cordifolia* wood decayed by white-rot and brown-rot fungi, **19**, 175
Expert System
IONIA: An Expert System for the prediction of the thermal decomposition of condensation polymers, **20**, 57

Fast atom bombardment tandem mass spectrometry
Pyrolysis fast atom bombardment tandem mass spectrometry characterization of coals, **20**, 1
Fast pyrolysis
Fast pyrolysis of natural polysaccharides as a potential industrial process, **19**, 41
Fats
The scope of pyrolysis methylation reactions, **20**, 15
Feedstock
Fast pyrolysis of natural polysaccharides as a potential industrial process, **19**, 41
Flame photometric detection
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263
Flame retardant
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromide and brominated styrene oligomers, **20**, 303

Flash pyrolysis
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25
Flash pyrolysis of silicon-bound hydrocarbons, **20**, 141
Forages
Pyrolysis–gas chromatography/mass spectrometry of lignocellulosics in forages and by-products, **19**, 203
Formaldehyde novolacs
Sequence of phenolic units in phenol–formaldehyde polycondensates studied by pyrolysis–gas chromatography/mass spectrometry, **19**, 251
Fourier transform infrared spectroscopy
Analysis of coal by thermogravimetry–Fourier transform infrared spectroscopy, **19**, 1
Free radical chain mechanism
Mechanistic modeling of the pyrolysis of *n*-hexane, **19**, 29
Fourier transform infrared spectroscopy
Coal characterization using pyrolysis–Fourier transform infrared spectroscopy, **20**, 171
Fuel formation
Pyrolysis and combustion kinetics of crude oils, asphaltenes and resins in relation to thermal recovery processes, **20**, 185
Furan compounds
Pyrolysis of various furan model compounds, **19**, 131
Fusarium oxysporum f.sp. *dianthi*
A microanalytical approach to plant tissue characterization a comparative study of healthy and fungus-infected carnation by pyrolysis–mass spectrometry, **19**, 213

Gas chromatography
A comparative study of three different pyrolysis methods used to characterise a biopolymer isolated from fossil and extant dammar resins, **20**, 125
Analytical pyrolysis as a tool for the characterization of organic substances in artistic and archaeological objects, **20**, 253
Applications of analytical pyrolysis to the study of stony cultural properties, **20**, 239
2-Butenoic acid, a chemical marker for poly-β-hydroxybutyrate identified by pyrolysis–gas chromatography/mass spectrometry in analyses of whole microbial cells, **19**, 237
Chemometric analysis of pyrolysate compositions: a model for predicting the organic matter type of source rocks using pyrolysis–gas chromatography, **20**, 87
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263
Flash pyrolysis of silicon-bound hydrocarbons, **20**, 141
Identification of polar monomers in poly acrylate dispersions with pyrolysis–gas chromatography/mass spectrometry, **19**, 279
Molecular archaeology: analysis of charred (food) remains from prehistoric pottery by pyrolysis–gas chromatography/mass spectrometry, **20**, 197
Natural rubber pyrolysis: study of temperature- and thickness-dependence indicates dimer formation mechanism, **19**, 301
Pyrolysis gas chromatographic studies on Egyptian archaeological specimens: organic patinas on the "Three Princesses" gold vessel, **20**, 229
Pyrolysis of various furan model compounds, **19**, 131
Pyrolysis–gas chromatography/mass spectrometry of lignocellulosics in forages and by-products, **19**, 203
Qualitative analysis of chlorolignins and lignosulphonates in pulp mill effluents entering the river Rhine using pyrolysis–mass spectrometry and pyrolysis–gas chromatography/mass spectrometry, **20**, 275
Quantitative analysis of saccharides in wood pulps by quartz-tube pulse pyrolysis–polar phase gas chromatography, **19**, 105
Sequence of phenolic units in phenol–formaldehyde polycondensates studied by pyrolysis–gas chromatography/mass spectrometry, **19**, 251
Solid state pyrolyses. Part 2. Solid state kinetics studied by pyrolysis–gas chromatography, **19**, 15
The decomposition of Posidonia Shale and Green River Shale kerogens using microscale sealed vessel (MSSV) pyrolysis, **20**, 107
Gas-chromatographic separation
Pyrolysis–gas chromatographic analyses of organic matter in soils using nitrogen-selective detection, **19**, 193
Geopolymers
Phenol–formaldehyde resins as a link to the understanding of the isothermal kinetic behavior of geopolymers (kerogens and coals), **19**, 265
Glucose
Quantitative analysis of saccharides in wood pulps by quartz-tube pulse pyrolysis–polar phase gas chromatography, **19**, 105
Gold
Pyrolysis gas chromatographic studies on Egyptian archaeological specimens: organic patinas on the "Three Princesses" gold vessel, **20**, 229

Heating rates
Thermal degradation mechanisms of amphiphilic acrylic copolymers studied by temperature-resolved pyrolysis–field ionization mass spectrometry, **19**, 285
Hemicellulose
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus infected carnation by pyrolysis–mass spectrometry, **19**, 213
Hexane
Mechanistic modeling of the pyrolysis of *n*-hexane, **19**, 29
High impact polystyrene
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromide and brominated styrene oligomers, **20**, 303
Hydrocarbons
Differentiation of Victorian brown coal lithotypes as revealed by thermally desorbable biomarkers, **20**, 161
Flash pyrolysis of silicon-bound hydrocarbons, **20**, 141
Hydrogen index
Chemometric analysis of pyrolysate compositions: a model for predicting the organic matter type of source rocks using pyrolysis–gas chromatography, **20**, 87
Hydroxyanthranilic acid
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus infected carnation by pyrolysis–mass spectrometry, **19**, 213

In situ combustion
Pyrolysis and combustion kinetics of crude oils, asphaltenes and resins in relation to thermal recovery processes, **20**, 185
Inertinite
The characterisation of two Australian bituminous coals and isolated maceral fractions by sequential pyrolysis–gas-chromatography/mass spectrometry, **20**, 151
Infrared spectroscopy
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations, **19**, 81
Ion chromatography
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263

Isothermal kinetic behavior
Phenol–formaldehyde resins as a link to the understanding of the isothermal kinetic behavior of geopolymers (kerogens and coals), **19**, 265

Kerogen
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25
Flash pyrolysis of silicon-bound hydrocarbons, **20**, 141
Phenol–formaldehyde resins as a link to the understanding of the isothermal kinetic behavior of geopolymers (kerogens and coals), **19**, 265
The decomposition of Posidonia Shale and Green River Shale kerogens using microscale sealed vessel (MSSV) pyrolysis, **20**, 107
The scope of pyrolysis methylation reactions, **20**, 15

Lamina
Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153
Laser desorption
Laser desorption multiphoton ionization mass spectrometry, **20**, 47
Levoglucosan
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations, **19**, 81
Light stabilisers
The scope of pyrolysis methylation reactions, **20**, 15
Lignin
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus infected carnation by pyrolysis–mass spectrometry, **19**, 213
Characterization of chemical and mechanical pulps by pyrolysis–gas chromatography/mass spectrometry, **19**, 139
Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153
Lignocellulosics
Pyrolysis–gas chromatography/mass spectrometry of lignocellulosics in forages and by-products, **19**, 203
Lignosulphonates
Qualitative analysis of chlorolignins and

lignosulphonates in pulp mill effluents entering the river Rhine using pyrolysis–mass spectrometry and pyrolysis–gas chromatography/mass spectrometry, **20**, 275

Lithotypes

Differentiation of Victorian brown coal lithotypes as revealed by thermally desorbable biomarkers, **20**, 161

Mass spectrometry

A comparative study of three different pyrolysis methods used to characterise a biopolymer isolated from fossil and extant dammar resins, **20**, 125

A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus infected carnation by pyrolysis–mass spectrometry, **19**, 213

Analytical pyrolysis as a tool for the characterization of organic substances in artistic and archaeological objects, **20**, 253

Applications of analytical pyrolysis to the study of stony cultural properties, **20**, 239

2-Butenoic acid, a chemical marker for poly-β-hydroxybutyrate identified by pyrolysis–gas chromatography/mass spectrometry in analyses of whole microbial cells, **19**, 237

Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25

Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65

Flash pyrolysis of silicon-bound hydrocarbons, **20**, 141

Identification of polar monomers in poly acrylate dispersions with pyrolysis–gas chromatography/mass spectrometry, **19**, 279

Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153

Molecular archaeology: analysis of charred (food) remains from prehistoric pottery by pyrolysis–gas chromatography/mass spectrometry, **20**, 197

Pyrolysis of various furan model compounds, **19**, 131

Pyrolysis–gas chromatography/mass spectrometry of lignocellulosics in forages and by-products, **19**, 203

Qualitative analysis of chlorolignins and lignosulphonates in pulp mill effluents entering the river Rhine using pyrolysis–mass spectrometry and pyrolysis–gas chromatography/mass spectrometry, **20**, 275

Sequence of phenolic units in phenol–formaldehyde polycondensates studied by pyrolysis–gas chromatography/mass spectrometry, **19**, 251

Mechanistic model

Mechanistic modeling of the pyrolysis of *n*-hexane, **19**, 29

(Meth)acrylate polymers

Identification of polar monomers in poly acrylate dispersions with pyrolysis–gas chromatography/mass spectrometry, **19**, 279

Methylated deutero-alditols

Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65

Microbial cells

2-Butenoic acid, a chemical marker for poly-β-hydroxybutyrate identified by pyrolysis–gas chromatography/mass spectrometry in analyses of whole microbial cells, **19**, 237

Microscale sealed vessel pyrolysis

The decomposition of Posidonia Shale and Green River Shale kerogens using microscale sealed vessel (MSSV) pyrolysis, **20**, 107

Midrib

Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153

Monomer recovery

Monomer recovery by pyrolysis of poly(methyl methacrylate) (PMMA), **19**, 311

Monomer/dimer ratio

Natural rubber pyrolysis: study of temperature- and thickness-dependence indicates dimer formation mechanism, **19**, 301

Multiphoton ionization

Laser desorption multiphoton ionization mass spectrometry, **20**, 47

Natural rubber

Natural rubber pyrolysis: study of temperature- and thickness-dependence indicates dimer formation mechanism, **19**, 301

Nitrogen-selective detection

Pyrolysis-gas chromatographic analyses of organic matter in soils using nitrogen-selective detection, **19**, 193

Oils

The scope of pyrolysis methylation reactions, **20**, 15

Organic compounds

Applications of analytical pyrolysis to the study of stony cultural properties, **20**, 239

Organic food residues

Molecular archaeology: analysis of charred

(food) remains from prehistoric pottery by pyrolysis–gas chromatography/mass spectrometry, **20**, 197

Organic matter
Pyrolysis–gas chromatographic analyses of organic matter in soils using nitrogen-selective detection, **19**, 193

Organic patinas
Pyrolysis gas chromatographic studies on Egyptian archaeological specimens: organic patinas on the "Three Princesses" gold vessel, **20**, 229

Organic substances
Analytical pyrolysis as a tool for the characterization of organic substances in artistic and archaeological objects, **20**, 253

Phenol–formaldehyde
Sequence of phenolic units in phenol–formaldehyde polycondensates studied by pyrolysis–gas chromatography/mass spectrometry, **19**, 251

Phenol–formaldehyde resin
Phenol–formaldehyde resins as a link to the understanding of the isothermal kinetic behavior of geopolymers (kerogens and coals), **19**, 265

Plastics
An exploratory study of the processing of plastics, by means of pyrolysis, with the emphasis on PVC/aluminum combinations, **20**, 321

Poly acrylate dispersion
Identification of polar monomers in poly acrylate dispersions with pyrolysis–gas chromatography/mass spectrometry, **19**, 279

Polybrominated dibenzofurans
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromide and brominated styrene oligomers, **20**, 303

Polybrominated diphenylethers
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromide and brominated styrene oligomers, **20**, 303

Poly-β-hydroxybutyrate
2-Butenoic acid, a chemical marker for poly-β-hydroxybutyrate identified by pyrolysis–gas chromatography/mass spectrometry in analyses of whole microbial cells, **19**, 237

Poly(methyl methacrylate)
Monomer recovery by pyrolysis of poly(methyl methacrylate) (PMMA), **19**, 311
Sample size dependence in pyrolysis: an embarrassment, or a utility?, **19**, 333

Poly-*p*-*tert*-butylstyrene
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25

Polysaccharides
A microanalytical approach to plant tissue characterization: a comparative study of healthy and fungus infected carnation by pyrolysis–mass spectrometry, **19**, 213
Characterization of chemical and mechanical pulps by pyrolysis–gas chromatography/mass spectrometry, **19**, 139
Fast pyrolysis of natural polysaccharides as a potential industrial process, **19**, 41
Thermal degradation of chitin and cellulose, **19**, 119

Polystyrene
Sample size dependence in pyrolysis: an embarrassment, or a utility?, **19**, 333

Polystyrene pyrolysis
Trimer formation studies in polystyrene pyrolysis reveal that time-resolved mass spectrometry can be misleading, **19**, 319

Prehistoric pottery
Molecular archaeology: analysis of charred (food) remains from prehistoric pottery by pyrolysis–gas chromatography/mass spectrometry, **20**, 197

Principal component analysis
Data analysis of pyrolysis–mass spectrometric profiles generated with soft ionization detection: application to barley tissue profiles, **20**, 73

Processing
An exploratory study of the processing of plastics, by means of pyrolysis, with the emphasis on PVC/aluminum combinations, **20**, 321

Pronase
Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153

Pulp mill effluents
Qualitative analysis of chlorolignins and lignosulphonates in pulp mill effluents entering the river Rhine using pyrolysis–mass

spectrometry and pyrolysis–gas chromatography/mass spectrometry, **20**, 275

Pulps
Characterization of chemical and mechanical pulps by pyrolysis–gas chromatography/mass spectrometry, **19**, 139

PVC/aluminum combinations
An exploratory study of the processing of plastics, by means of pyrolysis, with the emphasis on PVC/aluminum combinations, **20**, 321

Pyrolysis mass spectra
The interpretation of pyrolysis mass spectra of polymers using a "hybrid" software system based on library searching with heuristics, **20**, 65

Pyrolysis mechanisms
Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65

Pyrolysis single photon ionization
Laser desorption multiphoton ionization mass spectrometry, **20**, 47

Pyrolysis thermal desorption
Differentiation of Victorian brown coal lithotypes as revealed by thermally desorbable biomarkers, **20**, 161

Quantitation
Characterisation of kerogens, coals and asphaltenes by quantitative pyrolysis–mass spectrometry, **20**, 25

Quartz-tube pulse pyrolysis
Quantitative analysis of saccharides in wood pulps by quartz-tube pulse pyrolysis–polar phase gas chromatography, **19**, 105

Reaction kinetics
Pyrolysis and combustion kinetics of crude oils, asphaltenes and resins in relation to thermal recovery, **20**, 185

Resin
A comparative study of three different pyrolysis methods used to characterise a biopolymer isolated from fossil and extant dammar resins, **20**, 125
Pyrolysis and combustion kinetics of crude oils, asphaltenes and resins in relation to thermal recovery processes, **20**, 185

Reverse aldolisation
Characterisation of oligomers and sugar ring-cleavage products in the pyrolysate of cellulose, **19**, 65

Saccharides
Quantitative analysis of saccharides in wood pulps by quartz-tube pulse pyrolysis–polar phase gas chromatography, **19**, 105

Sample size
Sample size dependence in pyrolysis: an embarrassment, or a utility?, **19**, 333

Shale
The decomposition of Posidonia Shale and Green River Shale kerogens using microscale sealed vessel (MSSV) pyrolysis, **20**, 107

Silylation
Sequence of phenolic units in phenol–formaldehyde polycondensates studied by pyrolysis–gas chromatography/mass spectrometry, **19**, 251

Sodium chlorite
Pyrolysis–gas chromatography/mass spectrometry of lignocellulosics in forages and by-products, **19**, 203

Soils
Pyrolysis–gas chromatographic analyses of organic matter in soils using nitrogen-selective detection, **19**, 193

Solid state kinetics
Solid state pyrolyses. Part 2. Solid state kinetics studied by pyrolysis–gas chromatography, **19**, 15

Source rock OMTs
Chemometric analysis of pyrolysate compositions: a model for predicting the organic matter type of source rocks using pyrolysis–gas chromatography, **20**, 87

Stony cultural properties
Applications of analytical pyrolysis to the study of stony cultural properties, **20**, 239

Structural studies
Coal characterization using pyrolysis–Fourier transform infrared spectroscopy, **20**, 171

Styrene/MMA copolymer
Trimer formation studies in polystyrene pyrolysis reveal that time-resolved mass spectrometry can be misleading, **19**, 319

Sulfates
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263

Suspended particulate matter
Determination of sulfates in urban air by pyrolysis–gas chromatography with flame photometric detection, **20**, 263

Temperature resolved pyrolysis–mass spectrometry
Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved

pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromides and brominated styrene oligomers, **20**, 303

Thermal decomposition

Coal characterization using pyrolysis–Fourier transform infrared spectroscopy, **20**, 171

Thermal desorption

The characterisation of two Australian bituminous coals and isolated maceral fractions by sequential pyrolysis–gas-chromatography/mass spectrometry, **20**, 151

Thermal stability

Thermal degradation characteristics of high impact polystyrene/decabromodiphenylether/antimony oxide studied by derivative thermogravimetry and temperature resolved pyrolysis–mass spectrometry. Formation of polybrominated dibenzofurans, antimony (oxy)bromides and brominated styrene oligomers, **20**, 303

Thermogravimetric analysis

Analysis of coal by thermogravimetry–Fourier transform infrared spectroscopy, **19**, 1

Time of flight mass spectrometry

Laser desorption multiphoton ionization mass spectrometry, **20**, 47

Time-resolved mass spectrometry

Trimer formation studies in polystyrene pyrolysis reveal that time-resolved mass spectrometry can be misleading, **19**, 319

Tobacco

Micro-analytical investigations on lignin in enzyme-digested tobacco lamina and midrib using pyrolysis–mass spectrometry and Curie-point pyrolysis–gas chromatography/mass spectrometry, **19**, 153

Trimer formation

Trimer formation studies in polystyrene pyrolysis reveal that time-resolved mass spectrometry can be misleading, **19**, 319

Vacuum pyrolysis

Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations, **19**, 81

Vitrinite

The characterisation of two Australian bituminous coals and isolated maceral fractions by sequential pyrolysis–gas-chromatography/mass spectrometry, **20**, 151

White-rot fungi

An analytical pyrolysis mass spectrometric study of *Eucryphia cordifolia* wood decayed by white-rot and brown-rot fungi, **19**, 175

Wood

An analytical pyrolysis mass spectrometric study of *Eucryphia cordifolia* wood decayed by white-rot and brown-rot fungi, **19**, 175

Wood pulps

Quantitative analysis of saccharides in wood pulps by quartz-tube pulse pyrolysis–polar phase gas chromatography, **19**, 105

Xylose

Quantitative analysis of saccharides in wood pulps by quartz-tube pulse pyrolysis–polar phase gas chromatography, **19**, 105